

REMARKS

Claims 1-24 are pending in the application.

Claims 1-24 have been rejected.

Claim 1, 7, 10, 13, 16, 19, 21, and 23 have been amended.

No claims have been amended, as set forth herein.

I. REJECTION UNDER 35 U.S.C. § 103

Claims 1-2, 5-17 and 19-24 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Publication No. 2003/0210660 to Wiberg (hereinafter “*Wiberg*”) in view of U.S. Patent Publication No. 2004/0052236 to Hwang (hereinafter “*Hwang*”). The rejection is respectfully traversed.

Claims 3, 4 and 18 were rejected under 35 U.S.C. § 103 as being unpatentable over *Wiberg* in view of *Hwang*, and in further view of U.S. Patent Publication No. 2009/0213904 to Sun (hereinafter “*Sun*”). The rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicants' disclosure. MPEP § 2142. In making a rejection, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), *viz.*, (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; and (3) the level of ordinary skill in the art. In addition to these factual determinations, the examiner must also provide "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." (*In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir 2006) (cited with approval in *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007)).

Independent Claim 1 recites a method for supporting downlink JD (joint detection) in a TDD CDMA communication network system that includes the steps of:

judging whether CAI (code allocation information) in a downlink timeslot will change in a next TTI (transmission time interval);

inserting changed CAI as a specific control information into a specified field in a traffic burst in the downlink timeslot corresponding to current TTI only if the CAI will change, the changed CAI comprising spreading code resources associated with each of a plurality of UEs that uses the downlink timeslot;

sending the traffic burst containing the specific control information to each of the UEs in the downlink timeslot via a downlink channel.
[Emphasis Added].

Independent Claim 1 has been amended to recite, inter alia, “the changed CAI comprising spreading code resources associated with each of a plurality of UEs that uses the downlink timeslot.” Support for the amendment may be found in the Specification as filed, such as in paragraphs [0039] and [0042] – [0046]. The Applicants respectfully submit that *Wiberg* and *Hwang*, taken alone or in combination, do not teach each and every element recited in Claim 1. In particular, it is submitted that *Wiberg*, *Hwang*, or any combination thereof do not teach or suggest “inserting changed CAI [in which] the changed CAI comprises spreading code resources associated with each of a plurality of UEs that uses the downlink timeslot” as explicitly recited in independent Claim 1. There is no suggestion, teaching, or disclosure within *Wiberg* for such a feature. Furthermore, the teachings of *Hwang*, or *Sun* do not provide a disclosure that cures this deficiency.

In rejecting Claim 1, the Office Action asserts that Figure 9, Figure 10, and paragraph [0055] of *Wiberg* teaches inserting changed CAI as a specific control information into a specified field in a traffic burst in the downlink timeslot corresponding to current TTI only if the CAI will change. (See Office Action, page 4). The Applicants respectfully disagree. Figure 9 is a flowchart illustrating example code resource measurement procedures that may be performed by the teachings of *Wiberg*. (See *Wiberg*, paragraph [0031]). Paragraph [0055] of *Wiberg* describes example histogram mapping spreading codes (code allocation information (CAI)) that may be transmitted by the teachings of *Wiberg*. (See *Wiberg*, paragraph [0055]). These histogram mapping spreading codes are illustrated in Figure 10. (*Id*). As clearly seen in Figure 10 and its associated description in paragraph [0055], the histogram mapping spreading codes (CAI) are always transmitted in each transmission time interval (TTI). Thus, the cited portion of *Wiberg* does not teach or suggest “inserting changed CAI ... only if the CAI will change” as specifically recited in Applicants’ independent Claim 1. Furthermore, there is no teaching or suggestion within the entirety of *Wiberg* to transmit histogram mapping spreading code (CAI) only if the CAI will change. Additionally, the teachings of *Hwang*, or *Sun* do not cure the needed deficiencies of *Wiberg* as claimed in Applicants’ independent Claim 1.

The Applicants note that the “Response to Arguments” section of the Office Action has been reviewed. (See Office Action, page 2). Nevertheless, the Applicants respectfully submit that the

“Response to Arguments” section does not address the salient differences between the emphasized features of independent Claim 1 and the teachings of *Wiberg* as discussed above.

For at least these reasons, Claim 1 and its dependent claims are patentable. Independent Claims 7, 10, 13, 16, 19, 21, and 23 recite features similar to those presented above with respect to independent Claim 1. Therefore, independent Claims 7, 10, 13, 16, 19, 21, and 23 along with their respective dependent claims are also patentable.

Accordingly, the Applicants respectfully request that the § 103 rejection with respect to Claims 1, 7, 10, 13, 16, 19, 21, and 23 along with their respective dependent claims, be withdrawn.

II. CONCLUSION

As a result of the foregoing, the Applicants assert that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

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If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at rmccutcheon@munckcarter.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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